State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawaii 96813

February 25, 2011

Board of Land and Natural Resources Honolulu, Hawaii

Request for Approval to Add Federal Funding (\$336,561) and Extend through FY12 a Project

Agreement (Contract No. 58627) between the Board of Land and Natural Resources (BLNR) and
the Research Corporation of the University of Hawaii (RCUH) for the Division of Aquatic

Resources' Maui/Oahu Marine Resources Assessment Project

Submitted herewith for your consideration is a request to amend and extend an existing Project Agreement (Contract No. 58627) between BLNR and RCUH. Amendment No. 2 will add Federal funding in the amount of \$336,561 to the Contract and allow continuation of the project from July 1, 2011 to June 30, 2012. This Amendment is fully Federally-funded; no State General Funds are being used. The U.S. Fish and Wildlife Service Sport Fish Restoration Statewide Marine Research and Surveys grant for "Surveys of Fish and Habitat" totals \$345,000 in Federal funds with a required State match of \$115,000. The State component is being provided by Division of Aquatic Resources (DAR) in-kind match and community-based volunteer services.

The goal of the project is to provide information sufficient for DAR to be able to fulfill its mission to manage, conserve and restore the state's unique aquatic resources and ecosystems for present and future generations. The Agreement will enable DAR to secure assistance from RCUH in order to perform project objectives. RCUH's assistance is required in order for DAR to meet project goals and objectives in a timely way.

The Maui/Oahu Marine Resource Assessments Project will increase DAR's capacity to gather high quality scientifically based information for use in the development of future management efforts, and for evaluating the effectiveness of current regulations. In FY12 continued monitoring will be performed to assess the effectiveness of the recently enacted lay gill-net ban around the entire island of Maui and at specific locations on Oahu. The assessment of the lay gill-net rules involve shallow water visual census surveys as well as creel catch census efforts with recreational fishers. The project will also continue to examine causes of coral reef degradation at various locations with efforts made to specifically investigate the role that herbivorous fish and invertebrates play in helping control invasive seaweed growth and therefore, helping to maintain healthy coral reef habitats. Specific research will continue to be conducted at the recently implemented Kahekili Herbivore Fisheries Management Area in Ka'anapali, Maui. Past monitoring efforts at this location have identified lower than normal herbivorous fish populations, increasing problems with invasive seaweed growth and rapid coral reef degradation (50% of the living corals has disappeared in the last 14 years). This assessment project will look

into fish composition, grazing intensities and habitat health in this area and at suitable control locations. Of specific interest will be to continue to gather information on the role that grazing marine species play in helping keep the habitat healthy and controlling invasive algae. Additional research efforts will continue to try and identify key grazing fish species, and to quantify their beneficial effects on the coral reef ecosystem. These efforts should help to focus any future marine regulations on the specific grazing species that are most effective at maintaining healthy coral reef ecosystems, thereby reducing the likelihood of excessive regulations.—Information from assessment efforts will be used to improve knowledge regarding the general state of Hawaii's broad scale marine resources. This knowledge will be important to document the immediate and possible long-term impacts from natural forces (storms, hurricanes, crown of thorn sea-star blooms, etc.), anthropogenic disturbances (runoff, pollution, overfishing), and displacement of native marine species by alien species (fish, invertebrates and algae). Also in FY12, Maui project personnel will continue to improve upon the citizen science monitoring programs which help to gather and record broad scale observational information such as the presence and abundance of critical grazing fish species, to monitor alien species abundances and distribution, and to help establish an early warning system for outbreaks of fish and coral diseases.

Amendment No. 2 to the Project Agreement has been submitted to the Attorney General's Office for preliminary approval as to form. Also, Governor's approval to amend and extend the contract is being requested concurrently, through the Department of Budget and Finance for review and approval. DAR is aware that implementation of Amendment No. 2 is dependent upon receipt of all required approvals.

RECOMMENDATION:

"That the Board authorize the Chairperson to negotiate and, subject to necessary approvals, amend/extend a Project Agreement (Contract 58627) with the Research Corporation of the University of Hawaii for FY12."

Respectfully submitted,

ROBERT T NISHIMOTO

Program Manager

APPROVED FOR SUBMITTAL:

WILLIAM J. AILA, JR. Interim Chairperson